

t87_flang_3
(TMFU4hou4dtz8SaG7UvSMLxc3E9v1ZNK5H1)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k8_afinsq_1 : \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_flang_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_flang_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $v3_xxreal_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $np_1 : \iota$ be given. Let $k3_catalan2 : \iota \Rightarrow \iota$ be given. Let $k2_flang_1 : \iota \Rightarrow \iota$ be given. Let $k8_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k4_flang_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \Rightarrow ((v1_xboole_0 X0) \vee ((v2_xxreal_0 X1) \vee (v3_xxreal_0 X0)))))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 X0))) \Rightarrow (k2_flang_3 X0 X1 = k1_flang_3 X0 X1 np_1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0))) \Rightarrow (k2_flang_1 X0 \in k8_flang_1 X0 X1) \quad (4)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k3_xcmplx_0 np_1 X0 = X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski (k1_tarski X0) X1)\Leftrightarrow(X0 \in X1) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k3_catalan2 X0)))\Rightarrow(k7_flang_1 X0 X1 k6_numbers = k4_flang_1 X0 (k2_flang_1 X0)) \quad (7)$$

Assume the following.

$$m1_subset_1 k1_xboole_0 k4_ordinal1 \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 X0)))\Rightarrow(\forall X2.(v7_ordinal1 X2)\Rightarrow(\forall X3.(v7_ordinal1 X3)\Rightarrow((\neg r1_xxreal_0 X2 k6_numbers)\Rightarrow(k7_flang_1 X0 (k1_flang_3 X0 X1 X3) X2 = k1_flang_3 X0 X1 (k3_xcmplx_0 X3 X2)))))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k8_afinsq_1 X0)))\Rightarrow(\forall X2.(v7_ordinal1 X2)\Rightarrow((k1_flang_3 X0 X1 X2 = k8_flang_1 X0 X1)\Leftrightarrow((k2_flang_1 X0 \in X1)\vee(X2 = k6_numbers)))) \quad (10)$$

Assume the following.

$$((v2_xxreal_0 np_1)\wedge(m2_subset_1 np_1 k1_numbers k5_numbers))\wedge((m1_subset_1 np_1 k5_numbers)\wedge(m1_subset_1 np_1 k1_numbers)) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.r1_tarski X0 X0 \quad (12)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (13)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k3_catalan2 X0))\Rightarrow(k4_flang_1 X0 X1 = k1_tarski X1) \quad (15)$$

Assume the following.

$$\forall X0.k3_catalan2 X0 = k8_afinsq_1 X0 \quad (16)$$

Assume the following.

$$v1_xboole_0 \ k1_xboole_0 \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 \ X1 \ (k1_zfmisc_1 \ (k8_afinsq_1 \ X0))) \Rightarrow (m1_subset_1 \ (k2_flang_3 \ X0 \ X1) \ (k1_zfmisc_1 \ (k8_afinsq_1 \ X0))) \quad (18)$$

Assume the following.

$$\forall X0.m1_subset_1 \ (k2_flang_1 \ X0) \ (k3_catalan2 \ X0) \quad (19)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k4_ordinal1) \Rightarrow (v7_ordinal1 \ X0) \quad (20)$$

Assume the following.

$$\forall X0.((v1_xxreal_0 \ X0) \wedge (v2_xxreal_0 \ X0)) \Rightarrow ((\neg v1_xboole_0 \ X0) \wedge ((v1_xxreal_0 \ X0) \wedge (\neg v3_xxreal_0 \ X0))) \quad (21)$$

Assume the following.

$$\forall X0.(v1_xreal_0 \ X0) \Rightarrow (v1_xcmplx_0 \ X0) \quad (22)$$

Assume the following.

$$\forall X0.(v7_ordinal1 \ X0) \Rightarrow ((v7_ordinal1 \ X0) \wedge (\neg v3_xxreal_0 \ X0)) \quad (23)$$

Assume the following.

$$\forall X0.(v7_ordinal1 \ X0) \Rightarrow (v1_xxreal_0 \ X0) \quad (24)$$

Assume the following.

$$\forall X0.(v7_ordinal1 \ X0) \Rightarrow (v1_xreal_0 \ X0) \quad (25)$$

Theorem 1

$$\forall X0.\forall X1.(m1_subset_1 \ X1 \ (k1_zfmisc_1 \ (k8_afinsq_1 \ X0))) \Rightarrow (\forall X2.(v7_ordinal1 \ X2) \Rightarrow (r1_tarski \ (k7_flang_1 \ X0 \ (k2_flang_3 \ X0 \ X1) \ X2) \ (k1_flang_3 \ X0 \ X1 \ X2)))$$